

REMARKS

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Claim Amendments

Claim 1 has been amended to recite that “said crystalline aliphatic polyester is glycolic acid homopolymer”.

Claim 9 has been cancelled, without prejudice or disclaimer.

Rejection Under 35 U.S.C. § 112, Second Paragraph

The rejection of claim 1 as being indefinite under 35 U.S.C. § 112, second paragraph is rendered moot by the above-discussed claim amendments.

Consideration After Final Rejection

Although this Amendment is presented after final rejection, the Examiner is respectfully requested to enter the amendments and consider the remarks, as they place the application in condition for allowance.

Patentability Arguments

The patentability of the present invention over the disclosures of the references relied upon by the Examiner in rejecting the claims will be apparent upon consideration of the following remarks.

Rejection Under 35 U.S.C. § 103(a)

Claims 1-7 and 9-12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shiiki et al. (EP 0925915) in view of Kawakami et al. (U.S. 6,159,416). This rejection is respectfully traversed.

Shiiki et al. (EP '915) has been cited as disclosing a stretch blow molding process for producing a container including a layer of glycolic acid homopolymer (PGA) [0052] (page 3 of the Official Action). Kawakami ('416) has been cited as disclosing a stretch blow molding temperature of 30°C-100°C and a draw ratio in one direction of not higher than 10 times, preferably 1.5-5 times, and a blow-up ratio of 1.5-10 times (page 13, lines 27 - 38) (page 5 of the Office Action). The Examiner takes the position that it would have been obvious to one of ordinary skill in the art at the time the invention was made to produce a container with optimal values of the crystal melting point, sub-dispersion peak temperature, main dispersion peak temperature, and the orientation degree since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. (Please see the part bridging pages 4 and 5 of the Official Action.)

However, neither Shiiki (EP '915) nor Kawakami ('416) teaches or suggests that an improvement in crystalline properties as represented by an increase of at least 3°C in crystalline melting temperature of PGA can be attained through intense stretching as represented by a combination of a low stretching temperature of 45°C-60°C and a large areal stretching ratio of at least 3×3 times.

Moreover, the stretching conditions adopted in Example 1 of Kawakami ('416), including a stretch temperature of 45°C and a stretch ratio of about 2.25 times in a machine direction and a blow-up ratio of about 2.8, giving an areal stretch ratio of about 6.3 (=2.25×2.8), are substantially milder than 45°C and an areal stretch ratio of 9 (=3×3) times adopted in Comparative Example 1. The Examiner is reminded that Comparative Example 1 provided an increase in crystalline melting temperature of only 2°C (=218°C–216°C, as compared with the un-stretched film of Comparative Example 6) in the present specification.

Accordingly, it would have been unobvious for one of ordinary skill to arrive at an increase in crystal melting point of at least 3°C as an optimum value of a result effective variable by varying stretching conditions based on the teaching of Shiiki (EP '915) and Kawakami ('416),

since these references even fail to teach or suggest that modification of crystal properties of glycolic acid homopolymer (PGA) can be obtained by varying stretching conditions. The Examiner's position that determining optimal values of crystal melting point, sub-dispersion peak temperature, main dispersion peak temperature, and orientation degree would have been obvious is based only on the readings of Applicants' disclosure. The Examiner has provided no other basis for why one would alter the teachings of the references in the manner suggested.

Accordingly, for the reasons set forth above, the subject matter of Applicants' claims is patentable over the cited combination of references. Withdrawal of the rejection is respectfully requested.

Conclusion

Therefore, in view of the foregoing amendments and remarks, it is submitted that each of the grounds of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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